

REMARKS

Claims 24-29 are pending in the present application.

Claims 1-2, 5, and 21-23 are canceled with this amendment.

Claims 24-29 are new. Support in the specification for new claims 24-29 is at page 8, line 16 to page 9, line 6, and lines 16-21, page 10, lines 1-12, and pages 23-24 (Table).

The drawings were objected to under 37 CFR §1.84(p)(3). The Applicants have enclosed corrected drawings as requested by the Final Rejection.

Applicants respectfully request withdrawal of the rejection to the drawings.

Claims 1-2, 21 and 22 were rejected under 35 U.S.C. §102(b) as allegedly anticipated by or, in the alternative, under 35 U.S.C. §103(a) as allegedly unpatentable over Derwent Abstract, AN 1987-017861, JP-61275352.

Claims 1-2, 21 and 22 are canceled. Accordingly, this rejection is moot.

Present claims 24-29 are patentable over the Derwent Abstract. The Derwent Abstract does not teach or suggest a solvent swell which includes epsilon caprolactone in amounts of 20% bv to 80% bv as recited in present claim 24 or in amounts of 20% bv to 70% bv as recited in present claim 28. The Derwent Abstract specifically discloses gamma-caprolactone and delta-caprolactone. No where does the Derwent Abstract provide any reason or motivation for a solvent with epsilon-caprolactone as recited in the present claims.

The Table at the end of the specification of the present application shows that gamma-caprolactone is an unsuitable solvent swell especially when combined with N-methyl-2-pyrrolidone (NMP). Run#s 85-86, which included gamma-caprolactone and water had poor to moderate polymer texturing. In other words, the polymers showed unsatisfactory pore formation. Run#s 88-102 included gamma-caprolactone and NMP in various amounts. All showed poor pore formation. In contrast, formulations including epsilon caprolactone in amounts recited in the present claims had moderate to good polymer texturing (see Run#s 12-31 and 33-36).

Figures 2A and 2B show the type of porous texturing obtained by solvent swells within the scope of the presently claimed invention. The solvent swell was 40% bv epsilon caprolactone and 30% bv N-methyl-2-pyrrolidone (page 20, lines 4-6). Good surface texturing or porosity was

also obtained by a solvent swell which included epsilon-caprolactone in amounts of 30% bv and higher (page 20, lines 15-16). See Figures 4E-4J, which also show the type of porous texturing obtainable with the presently claimed solvent swell. Such porous texturing provides a mechanical means by which metals deposited on the porous surface form a mechanical bond of high integrity. Such high integrity bonding prevents warping, blistering, cracking of the metallized substrate, and the metal-resin bond does not readily de-laminate (see page 5, lines 14-17).

In contrast, the majority of the solvent swells containing gamma-butyrolactone or gamma-caprolactone showed poor texturing or shingling. Figures 3A and 3B show the undesirable shingling caused by a solvent swell containing 40% bv gamma-butyrolactone and 30% bv N-methyl-2-pyrrolidone; Figures 5A-5J show the undesirable texturing of a solvent swell containing 10% bv to 50% bv of gamma-butyrolactone; and Figures 6A and 6D show the moderate texturing obtained with a solvent swell containing 10% bv of gamma-caprolactone. Accordingly, the presently claimed invention is an improvement over other lactone solvent swells. The documents cited by the Office Action do not appreciate the improvements of the presently claimed invention. Accordingly, the presently claimed invention is patentable over the Derwent Abstract.

Claims 1-2, 5 and 21-23 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. 5,985,040 to Carano et al. in view of U.S. 4,824,443 to Matson et al.

Claims 1-2, 5 and 21-23 are canceled. Accordingly, the rejection is moot.

New claims 24-29 are patentable over Carano et al. alone or in combination with Matson et al. Carano et al. are limited only to gamma-butyrolactone formulations.

Matson et al. do not make up for the deficiencies of Carano et al. Matson et al. do not teach or suggest the amounts of epsilon-caprolactone or amides as recited in the presently claimed invention to achieve the desired porous texturing.

Accordingly, the present claims are patentable over Carano et al. alone or in combination with Matson et al.

Favorable consideration and allowance of claims 24-29 are earnestly solicited.

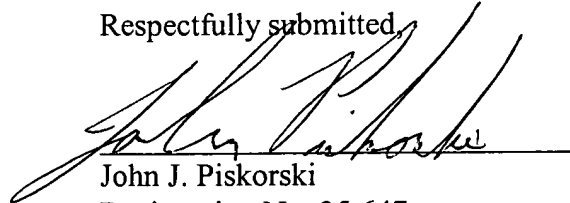
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Filed: 02/22/2002

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Should the examiner have any questions concerning this response or this application, or should he believe this application is for any reason not yet in condition for allowance, he is respectfully requested to telephone the undersigned at the number set forth below to expedite allowance of this application.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "John J. Piskorski", is written over a horizontal line.

John J. Piskorski

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